



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/628,280

07/28/2003

Kenneth S. Goss

1580.0200011

5186

7590 02/25/2008
Raymond M. Galasso
Simon, Galasso & Frantz PLC
P.O. Box 26503
Austin, TX 78755-0503

EXAMINER

HOSSAIN, TANIM M

ART UNIT

PAPER NUMBER

2145

MAIL DATE

DELIVERY MODE

02/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/628,280 | Applicant(s) GOSS ET AL. | |
| | Examiner Tanim Hossain | Art Unit 2145 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ott (U.S. 6,671,802) in view of Rothman (U.S. 2004/0088531).

As per claim 1, Ott teaches a method for facilitating system management in a data processing system, comprising: tracking status information of a system component of a platform-side operating system in a data processing system, wherein said tracking is facilitated by a service processor of the data processing system (column 1, lines 34-65; where the memory optimization is monitored and enacted); and configuring the platform-side operating system dependent at least partially upon said status information (column 1, lines 34-65; where the optimization process constitutes configuring the operating system, as the operating system function has changed based on the operating system's previous status). Ott does not specifically teach that the configuring is facilitated by the firmware of the system. Rothman teaches the configuration of system components, facilitated by the firmware of the system (paragraphs 0009, 0013, 0015, 0017, 0023). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to use the firmware to configure OS components, as

taught by Rothman in the system of Ott. The motivation for doing so lies in the fact that Ott teaches the monitoring and configuring of an operating system, and to extend that to be facilitated by the firmware would enable further diversity of the system, such that the changes can take into account hardware and firmware conditions. Both inventions are from the same field of endeavor, namely the efficient optimization of computer systems.

As per claim 2, Ott-Rothman further teaches that said tracking includes: probing a device driver associated with the system component (Rothman: 0009); and receiving said status information from the device driver (Rothman: 0026).

As per claim 3, Ott-Rothman further teaches enabling access of at least a portion of said status information by said platform firmware for enabling said configuring to be facilitated, wherein said enabling access is facilitated by the service processor (Rothman: 0026).

As per claim 4, Ott-Rothman further teaches that said platform firmware includes boot-time firmware (Rothman: 0026); and said enabling access includes transmitting at least a portion of said status information at boot-time by the service processor for reception by said boot-time firmware (Rothman: 0028).

As per claim 5, Ott-Rothman further teaches that said transmitting includes transmitting over a network connection (Rothman: 0028).

As per claim 6, Ott-Rothman further teaches that said platform firmware includes run-time firmware; and said enabling access includes maintaining at least a portion of said status information in a persistent data structure that is accessible by said run-time firmware thereby enabling said run-time firmware to access at least a portion of said status information (Rothman: 0030).

As per claim 7, Ott-Rothman teaches the method of claim 1, but does not specifically teach the monitoring of an adverse condition and making a corrective action based on the adverse condition. It would have been obvious to one of ordinary skill in the art to account for adverse conditions and make changes on the fly, as a result. This concept of active monitoring and correcting is well known in the art, and its specific inclusion into the system would enable a more efficient and robust system, such that potential adverse situations can be avoided.

As per claim 8, Ott-Rothman further teaches determining that the system component is a redundant system component that is idle during a present operating system instantiation (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023); monitoring status of the system component during the present operating system instantiation (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023); and implementing a specified corrective action in response to a determination that the system component is at least temporarily unable to provide intended redundancy functionality (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023).

As per claim 9, Ott-Rothman further teaches receiving user-specified configuration information via a service processor based user-interface (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023); and transmitting at least a portion of said user-specified configuration information by the service processor for reception by said platform firmware (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023); wherein said configuring is further dependent at least partially upon said user-specified configuration information (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023).

As per claim 10, Ott-Rothman teaches a method for facilitating system management in a data processing system, comprising: tracking status information of a system component of a platform-side operating system in a data processing system (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023); and enabling access of at least a portion of said status information by platform firmware of the data processing system for enabling the platform-side operating system to be configured dependent at least partially upon said status information (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023); wherein said tracking and said enabling access are facilitated by a service processor of the data processor system (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023).

Claims 11-17 are rejected on the same bases as claims 2 and 4-9 respectively, as the instant claims disclose limitations similar to the earlier claims.

As per claim 18, Ott-Rothman teaches a method for facilitating system management in a data processing system, comprising: accessing status information of a system component of a platform-side operating system in a data processing system (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023); and configuring the platform-side operating system dependent at least partially upon said status information (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023); wherein said accessing and at least a portion of said configuring are facilitated by platform firmware of the data processing system (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023).

As per claim 19, Ott-Rothman further teaches that said accessing is facilitated in response to said status information being transmitted by a service processor of the data processing system

for reception by said platform firmware (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023).

Claims 20-22 are rejected on the same bases as claims 4-6 respectively, as the instant claims disclose limitations similar to the earlier claims.

As per claim 23, Ott-Rothman further teaches receiving user-specified configuration information transmitted by the service processor for reception by the platform firmware, wherein said configuring is further dependent at least partially upon said user-specified configuration information (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023).

As per claim 24, Ott-Rothman further teaches that said configuring includes implementing a specified corrective action for a particular redundant system component in response to said status information indicating that the particular redundant system component is unavailable to provide intended redundancy functionality (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023).

As per claim 25, Ott-Rothman further teaches that the specified corrective action includes at least one of issuing a notification of the unavailability of the particular redundant system component and issuing notification to repair or replace that component for maintaining fail-over capacity (Ott: column 1, lines 34-65; Rothman: paragraphs 0009, 0013, 0015, 0017, 0023).

Claims 26-50 are rejected under Ott-Rothman on the same bases as claims 1-25 respectively, as the instant claims disclose limitations similar to the earlier claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is (571)272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571/272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tanim Hossain
Patent Examiner
Art Unit 2145

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145